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DATE: MARCH 7, 2002

NUMBER OF PAGES (INCLUDING  
THIS TRANSMITTAL COVER SHEET): 2

TIME:

OUR REFERENCE: 206008

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MAR 7 - 2002

TECHNOLOGY CENTER 2800

IN RE APPLN. OF: SAUNDERS ET AL.  
APPLICATION NO. 09/622,382  
FILED: JANUARY 12, 2001  
FOR: ADAPTIVE MULTIFILAR ANTENNA  
GROUP ART UNIT: 2821  
EXAMINER: J. KLINGER

2821

PER OUR TELEPHONE CALL, HERE IS A COPY OF PAGE 14 OF THE SUBJECT PCT CASE, WHICH  
PAGE SHOWS CLAIMS 20-23.

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operates at baseband.

20. An antenna according to any of claims 1 to 18, wherein the weighting circuit operates at RF.

21. An antenna according to claim 20, wherein the respective outputs of the weighting circuit are combined prior to frequency downconversion.

22. An adaptive multifilar antenna comprising:

n spaced antenna filaments, where n is an integer greater than 1;

a matching circuit for matching the characteristic impedance of the antenna to that of a transmitting and/or receiving apparatus;

a phasing circuit for applying respective gain and phase adjustments to signals passed to or from the n filaments;

switch means associated with each filament for selectively altering the electrical length and/or interconnections of the filaments;

means for detecting electrical properties of the multifilar antenna with respect to the frequency, polarisation and/or direction of propagation of a signal to be received or transmitted by the multifilar antenna and/or impedance matching of the antenna; and

control means, responsive to the detecting means, for controlling the operation of the matching circuit, the phasing circuit and the switch means to adjust the properties of the multifilar antenna to suit better a current signal to be received or transmitted.

23. A multifilar antenna substantially as hereinbefore described with reference to the accompanying drawings.